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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,331	01/22/2004	Pen-Jung Lee	BHT-3244-24	2696

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EXAMINER

THOMAS, BRANDI N

ART UNIT	PAPER NUMBER
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2873

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/761,331

Applicant(s)

LEE, PEN-JUNG

Examiner

Brandi N Thomas

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Detailed Action.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 6-9, and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Ushiro et al. (4939588).

Regarding claim 1, Ushiro et al. discloses, in figures 3 and 4, a flat type light condensing device arranged in an optical path device of an image readout device comprising: a) a hollow frame (1) having a rectangular cross-sectional configuration with rectangular openings (1a and 1d) at two opposite ends (col. 2, lines 38-40 and col. 3, lines 17-19); and a plurality of lenses (11, 12, 14, 16, and 17) located within the hollow frame (1) between the openings (1a and 1d) at opposite ends, the plurality of lenses (11, 12, 14, 16, and 17) having cross-sectional dimensions at least equal to corresponding dimensions of the rectangular openings (1a and 1d) (col. 2, lines 52-55).

Regarding claim 3, Ushiro et al. discloses, in figures 3 and 4, a flat type light condensing device arranged in an optical path device of an image readout device, wherein said plurality of lenses (11 and 12) are circular, and said openings (1a and 1d) at two ends of said frame (1) are comprise a rectangular light incidence region (1a) and a rectangular light escape region (1d), respectively (col. 2, lines 38-40 and 52-55 and col. 3, lines 17-19).

Art Unit: 2873

Regarding claim 6, Ushiro et al. discloses, in figures 3 and 4, a flat type light condensing device arranged in an optical path device of an image readout device, wherein said lenses (11, 12, 14, 16, and 17) comprises a light incidence piece (14), a light condensing piece set (13) and a light splitting piece (17), said light incidence piece has a size corresponding to a scan size of a scanner, said light splitting piece has a size corresponding to that of a charge coupled device, and said light condensing piece set is composed of more than one lens (11 and 12) (col. 2, lines 53 and 54).

Regarding claim 7, Ushiro et al. discloses, in figures 3 and 4, a flat type light condensing device arranged in an optical path device of an image readout device, wherein a charge coupled device (40) is assembled in said frame (1) (col. 3, lines 28-30).

Regarding claim 8, Ushiro et al. discloses, in figures 3 and 4, an optical path device for optical equipment, said optical path device comprising: a) a light source (10) device providing light (col. 2, line 52); b) a reflecting device comprising at least a reflecting mirror (15), each said reflecting mirror (15) reflecting said light at least once to accomplish a predetermined total track (col. 2, lines 55-58); a light condensing device (13) receiving light reflected by said reflecting device and condensing it for imaging (col. 2, lines 52-53 and col. 4, lines 37-40), said light condensing device comprising a plurality of lenses (11, 12, 14, 16, and 17) mounted in a hollow frame (1) having rectangular openings (1a and 1d) in two opposite ends thereof (col. 2, lines 38-40 and col. 3, lines 17-19) the plurality of lenses (11, 12, 14, 16, and 17) having cross-sectional dimensions at least equal to corresponding dimension of the rectangular openings (1a and 1d); and d) an OE converter receiving light collected and imaged by said light condensing device and converting it the light into an electric signal (col. 3 61-68 and col. 4, lines 1-4).

Art Unit: 2873

Regarding claim 9, Ushiro et al. discloses, in figures 3 and 4, an optical path device for optical equipment, wherein said OE converter is arranged in an end of said frame of said light condensing device (col. 3 61-68 and col. 4, lines 1-4).

Regarding claim 12, Ushiro et al. discloses, in figures 3 and 4, an optical path device for optical equipment, wherein said lenses (11 and 12) are circular, and said openings (1a and 1d) at two ends of said frame (1) are comprise a rectangular light incidence region (1a) and a rectangular light escape region (1d), respectively (col. 2, lines 38-40 and 52-55 and col. 3, lines 17-19).

Regarding claim 13, Ushiro et al. discloses, in figures 3 and 4, an optical path device for optical equipment, wherein said lenses (11, 12, 14, 16, and 17) comprises a light incidence piece (14), a light condensing piece set (13) and a light splitting piece (17), said light incidence piece has a size corresponding to a scan size of a scanner, said light splitting piece has a size corresponding to that of a charge coupled device, and said light condensing piece set is aspheric (11 and 12) (col. 2, lines 53 and 54).

Regarding claim 14, Ushiro et al. discloses, in figures 3 and 4, an optical path device for optical equipment, wherein an end of said flay type light condensing device near said reflecting device (15) is equal to or larger than an end of said flay type light condensing device near said OE converter (figure 4).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2873

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 4, 5, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ushiro et al. (4939588) as applied to claim 1 above, and further in view of Holliday (3957358).

Regarding claims 2, 4, and 10, Ushiro et al. discloses, in figures 3 and 4, a flat type light condensing device arranged in an optical path device of an image readout device, wherein said plurality of lenses (11, 12, 14, 16, and 17) are rectangular lenses locked in said frame (1) except that it does not show that the frame is integrally formed of a material selected from a group consisting of plastic, metal or and ceramic material. Holliday shows that it is known to provide a frame is integrally formed of a material selected from a group consisting of plastic, metal or and ceramic material for being attractable by a magnet (col. 3, lines 3-10). Therefore it would have been obvious to someone of ordinary skill in the art at the time the invention was made to combine the device of Ushiro et al. with the metal frame of Holliday for the purpose of being attractable by a magnet (col. 3, lines 3-10).

Regarding claim 5, Ushiro et al. and Holliday disclose a flat type light condensing device arranged in an optical path device of an image readout device but does not specifically disclose the lenses made of plastic to prevent deformation due to temperature. However, it would have been obvious to someone of ordinary skill in the art at the time the invention was made to use a plastic material to make the lenses for the purpose of plastics ability to withstand extreme conditions in temperature.

Regarding claim 11, Ushiro et al. discloses, in figures 3 and 4, an optical path device for optical equipment, wherein said frame (1) comprises a plurality of rectangular sub-frames but

Art Unit: 2873

does not specifically disclose the lenses made of plastic to prevent deformation due to temperature. However, it would have been obvious to someone of ordinary skill in the art at the time the invention was made to use a plastic material to make the lenses for the purpose of plastics ability to withstand extreme conditions in temperature. Ushiro et al. also does not show that the frame is integrally formed of a material selected from a group consisting of plastic, metal or and ceramic material. Holliday shows that it is known to provide a frame is integrally formed of a material selected from a group consisting of plastic, metal or and ceramic material for being attractable by a magnet (col. 3, lines 3-10). Therefore it would have been obvious to someone of ordinary skill in the art at the time the invention was made to combine the device of Ushiro et al. with the metal frame of Holliday for the purpose of being attractable by a magnet (col. 3, lines 3-10).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandi N Thomas whose telephone number is 571-272-2341. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2873

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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